

SEMICONDUCTOR MEMORY DEVICE*aw
9/2/01*

CROSS REFERENCE TO RELATED APPLICATION

- [01] This application is a continuation of prior U.S. patent application no. 09/964,851, filed September 28, 2001, ^{NOW U.S. PATENT No. 6,617,651,} which claims the benefit of priority under 35 U.S.C. § 119 to Japanese Patent Application No. 2001-220461 filed on July 19, 2001, the entire contents of which are incorporated by reference herein.

BACKGROUND OF THE INVENTION

Field of the Invention

- [02] The present invention relates to a semiconductor memory device, specifically, to a semiconductor memory device having full depletion type MISFETs.

Related Background Art

- [03] In a related DRAM, a memory cell is composed of an MOS transistor and a capacitor. The scale-down of the DRAM has been remarkably advanced by the adoption of a trench capacitor structure and a stacked capacitor structure. At present, the cell size of a unit memory cell is scaled down to an area of $2F \times 4F = 8F^2$, where F is a minimum feature